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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/670,306	09/26/2003	Ronald Bruno	0918.0216C	5349

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EXAMINER

MEHRA, INDER P

ART UNIT PAPER NUMBER

2617

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
31 DAYS	02/22/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/670,306

Applicant(s)

BRUNO, RONALD

Examiner

Inder P. Mehra

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) ____ is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☒ Claim(s) 1-43 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

1. This office action is in response to application dated: 3/3/04. Based on this application, claims 1-43 are pending.

Election~Restrictions

2. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-6, 18-20, 23-43, drawn to a control site communicates with a plurality of aircraft via a plurality of ground stations, wherein each of the plurality of aircraft is in radio communication with at least one of the plurality of ground stations, and the plurality of ground stations and the plurality of aircraft share a common air/ground communication channel, classified in class 455 subclasses 450 and class 370 subclass 312-313.
 - II. Claims 7-11, drawn to a method of managing a plurality of unique aircraft addresses for assignment to the plurality of aircraft, wherein each of the plurality of aircraft is in radio communication with at least one of the plurality of ground stations, classified in class 455, subclass 200-390 and class 370 subclass 349.
 - III. Claims 12-14, drawn to a method of coordinating a handover of responsibility for periodically polling one of said plurality of aircraft from a first ground station to a second ground station, classified in class 455, subclass 456.1.
 - IV. Claims 15-17, drawn to a method of selecting a ground station from the plurality of ground stations to transmit a message to a uniquely identified aircraft; and claims 21-22 drawn to a method of selecting an air to ground communication signal originating from one of the

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plurality of aircraft and received by more than one of the plurality of ground stations, classified in class 455, subclass 430 and 431.

3. The inventions are independent or distinct, each from the other because of the following

- a. Invention 1 deals with a method of **allocating transmission time slots** to the plurality of ground stations, the method comprising: (a) **building a transmission time slot schedule containing a transmission time slot allocation for at least one of the plurality of ground stations; and (b) distributing the transmission time slot schedule from the control site to at least one of the plurality of ground stations;**
- b. Invention II deals with a method of managing a plurality of **unique aircraft addresses** for assignment to the plurality of aircraft, wherein each of the plurality of aircraft is in radio communication with at least one of the plurality of ground stations
- c. Invention 111 deals with a method of coordinating a **handover of responsibility for periodically polling one of said plurality of aircraft from a first ground station to a second ground station**, receiving at the control site a poll response report from the first ground station and a poll response report from the second ground station, wherein each of the poll response reports contains a time of arrival (TOA) of a poll response at each of the first and second ground stations, respectively;
- d. Invention IV deals with a method of **selecting a ground station from the plurality of ground stations to transmit a message to a uniquely identified aircraft**, the method of receiving at the control site from at least one of the plurality of ground stations a message that includes at least one of a ground station identifier, a unique aircraft identifier, a

unique message identifier, a signal time of arrival (TOA) at the receiving ground station and signal quality information, as determined by the receiving ground station;

3. Because these inventions are independent or distinct for the reasons given above and the inventions require a different field of search (see MPEP § 808.02), restriction for examination purposes as indicated is proper.

4. Because these inventions are independent or distinct for the reasons given above and have acquired a separate status in the art in view of their different classification, restriction for examination purposes as indicated is proper.

5. Inventions I, II, III and IV are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct if they do not overlap in scope and are not obvious variants, and if it is shown that at least one subcombination is separately usable. In the instant case, subcombinations have separate utility, such as, follows:

Invention group I deals with building a transmission time slot schedule containing a transmission time slot allocation for at least one of the plurality of ground stations; and distributing the transmission time slot schedule from the control site to at least one of the plurality of ground stations.

Invention group II deals with managing a plurality of unique addresses for assignment to

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the plurality of unique aircraft addresses and delegating authority to assign at least one of the plurality of unique aircraft addresses from the control site to at least one of the plurality of ground stations.

Invention group III deals with coordinating a handover of responsibility for periodically polling one of said plurality of aircraft from a first ground station to a second ground station.

Invention group III deals with a method of selecting a ground station from the plurality of ground stations to transmit a message to a uniquely identified aircraft, the method involves receiving at the control site from at least one of the plurality of ground stations a message that includes at least one of a ground station identifier, a unique aircraft identifier, a unique message identifier, a signal time of arrival (TOA) at the receiving ground station and signal quality information, as determined by the receiving ground station; See MPEP § 806.05(d).

6. Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In

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either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C.103(a) of the other invention. consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

7. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Inder P. Mehra whose telephone number is 571-272-3170. The examiner can normally be reached on Monday through Friday from 8AM to 5PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Feild can be reached on 571-272-4090. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

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like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Inder Pal Mehra 2/17/07
Inder P Mehra
Examiner
Art Unit 2617


JOSEPH FEILD
SUPERVISORY PATENT EXAMINER